each group; and the figures for treatment response in each group should approximate more closely than the results show (see Table). For this reason the simple end-point of clear urine after one week was used in the trial to assess the effectiveness of therapy.

It is therefore on the comparative nature of these results that we have based our opinion of the doubtful efficacy of the one-dose treatment.

Our results with procaine penicillin are approximately in line with those found by other workers using this drug. Our results with ampicillin do not agree with those of several workers, notably Groth and Hallqvist (1970), Willcox and others (1973), Cobbold and others (1973), and Jersild and Svendsen (1973).

Taking our overall experience, therefore, it appears that in 36 patients treated with ampicillin the re-treatment rate was 58 per cent., whereas in those treated with procaine penicillin it was 26 per cent.

Yours faithfully,
K. L. AMARASURIYA, J. J. ROHATINER, and A. S. GRIMBLE

DEPARTMENT OF VENEREOLOGY,
GUY'S HOSPITAL, LONDON
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Elimination of gonorrhoea

TO THE EDITOR *British Journal of Venereal Diseases*

SIR—In their letters to the editor, Felton (1973) and Spencer (1973) gave some additional thoughts on the paper 'Potential impact of chemical prophylaxis on the incidence of gonorrhoea' by Lee, Utidjian, Singh, Carpenter, and Cutler (1972).

Felton stated that 'the question of the acceptability of the intravaginal contraceptive compounds (ICC) *vis à vis* other contraceptive and preventive measures is not discussed. It seems to be assumed there is no substantial hindrance to their use by up to 30 per cent. of the population at risk. . . .' I agree that the acceptability of the ICC is one of the most important factors if it is to help bring the epidemic of gonorrhoea under control. It was pointed out by Lee and others that a prophylactic programme alone cannot be expected to eliminate the disease. Its greatest value will be obtained by incorporating it into the existing programme of treatment and education. Public health workers have to find ways of convincing potential patients that no single prophylactic agent is 100 per cent. effective. Also, the patients themselves must develop a greater sense of responsibility to protect themselves from infection by employing prophylactic methods.

Felton also pointed out that the Lee model assumes either unlimited partner-change activity or increased partner-change activity in line with an increase in gonorrhoea. This is of course not true. The Lee model employed the constant rate of becoming infected by exposure to an infected partner. It did not put the number of sexual acts per generation into the model explicitly, but this was considered from the point of view of point-prevalence. It is a census type of measure and it represents the frequency of the disease at a designated point in time (MacMahon and Pugh, 1970).

Factors, such as number of partner-change intercourses and inequality of male and female infectious periods, may 'in reality' help to determine the number of cases at a particular time. However, also 'in reality', the variables may be very difficult to incorporate into a model if, indeed, they can be defined at all. Future inspection of the Felton model will be necessary before the relative merits of the two models can be assessed.

The Lee model may indeed be improved upon, as can any tool. However, as an initial attempt to explain what has been observed and to predict what might be observed with an ICC, this model seems to be a good beginning (Sussman, 1973).

Felton also stated that 'if a higher rate of infection and removal rate had been chosen, the predicted benefit of ICC would have been even more rapid'. This is not precisely true. The predicted benefit of ICC depends on infection rate, removal rate, proportion of usage of ICC by potential patients, and the effectiveness of the ICC. Only if a larger difference between infection rate and removal rate had been chosen, would the predicted benefit of ICC have been more rapid.

At the end of his letter, Felton concluded that '. . . the use of ICC at the levels of effectiveness put forward by Lee and his co-workers will produce a simple rather than a compound decrease.' According to Webster's New College Dictionary (1973), the term 'compound'

is defined as pay (interest) on both the accrued interest and the principle. Now, if we look back into Table I in Lee's paper, we can see that 1,169 cases of gonorrhoea at the end of 1 year is the compound effect rather than 1,156 cases which is a simple linear effect.

I can only partially agree with Spencer (1973) that 'the most impressive results in preventive medicine have been obtained by public health measures dependent on neither the infected person nor the potential sufferer. . . . We put the onus on the patients themselves. This will not work.' It has been reported that venereal diseases are probably the first infectious diseases to be brought under control in the People's Republic of China as a byproduct of the change in the socio-economic structure (Quinn, 1972). The attempts to control venereal diseases are clearly based upon different economic and political systems. However, within the existing economic and political system in the Western countries, prophylactic measures have to be incorporated into the programmes of the public health and education departments, at least until we can develop an effective vaccine, which seems a long way off in the future.

Yours faithfully,

TZUO-YAN LEE, SC.D.

PENN-BROOKE GARDENS, APPT 2B,
CHURCH RD, NORTH WALES,
PA 19454, U.S.A.

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